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REMARKS

Claims 1-18 were originally pending in this application. Two new dependent claims (19 and 20) have been added by this amendment.

As recited in the claims, the present invention is directed to a non-woven fabric comprising a plurality of yarns that have been formed into an aligned group of substantially parallel strands. This parallel grouping of yarns is fixed in the aligned relationship, by forming a non-continuous adhesive coating, printed on only one side of the yarns. Cooling of the hot melt adhesive occurs almost instantaneously, and the resulting product is a fixed web or substrate consisting essentially of a plurality of aligned yarns and an adhesive coating or layer on one side of said fibers.

Claims 1, 2 and 11 have been amended to clarify the nature of the present invention, in that they now clearly recite the fact that the parallel yarns are bonded or coated with a non-continuous adhesive on "only one side" in the present invention. This fact is dictated by the processing equipment used in the manufacture of the claimed warp yarn fabric, as taught throughout the specification as filed. No new matter has been introduced by virtue of this amendment to the claims.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,041,028 to Gott in view of Garick, U.S. Patent No. 3,758,329. According to the Office Action:

Gott discloses a nonwoven fabric comprising a plurality of strands which are coated with an adhesive on one side as well as the method of making the fabric comprising providing the parallel fibers which are oriented in the warp direction, and applying a predetermined quantity of melted adhesive to the fibers, see col. 1, lines 1-62.

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Gott differs from the claimed invention because Gott does not disclose employing glass or metallic fibers in the fabric and because Gott does not disclose the claimed thickness of the coating or the amount of the coating employed. With regard to the amount of coating and the thickness, it would have been obvious to one of ordinary skill in the art to have selected the thickness and the amount of adhesive coating employed through the process of routine experimentation since the amount of adhesive would be directly related to the strength of the fabric as a whole.

With regard to the use of other types of fibers, Garick discloses that strands of other materials such as parallel strands of glass, metal or synthetic resin filaments can be coated on one side with a heat softenable material which corresponds to the claimed adhesive material. See col. 2, line 67 - col. 3, line 10.

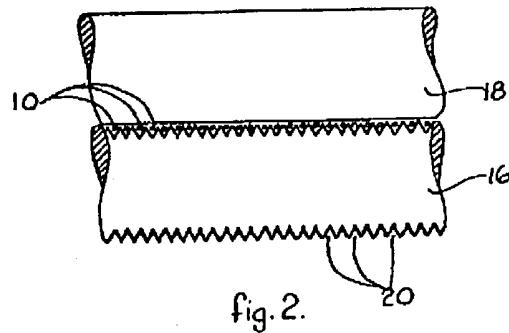
Therefore, it would have been obvious to have employed the other types of fibers disclosed by Garick as the fibers to be formed into the fabric of Gott. One of ordinary skill in the art would have been motivated to use other types of fibers because Garick teaches that such fibers are useful and further, it would have been obvious because the different types of fibers would have been useful for imparting properties such as strength, conductivity, etc to the finished product of Gott.

Applicant respectfully disagrees with the quoted characterizations of the prior art, and the conclusion of obviousness based thereon.

As defined in the amended claims, the non-woven fabric of the present invention consists essentially of substantially parallel warp-direction yarns, supported and bonded on by a random and uneven, non-continuous - adhesive coating. This coating is described as forming "bridges" in the specification (see, e.g., page 5). In contrast thereto, the yarns of both cited references do not have this feature.

See, for example, Gott, GB 2041028, at Page 2, Col. 1, lines 42-58, which provides for the use of a "reservoir of adhesive" between his trough (22) and his roller (16) which give an "even, continuous coat" of adhesive to each of his yarns. This is illustrated in Figure 2:

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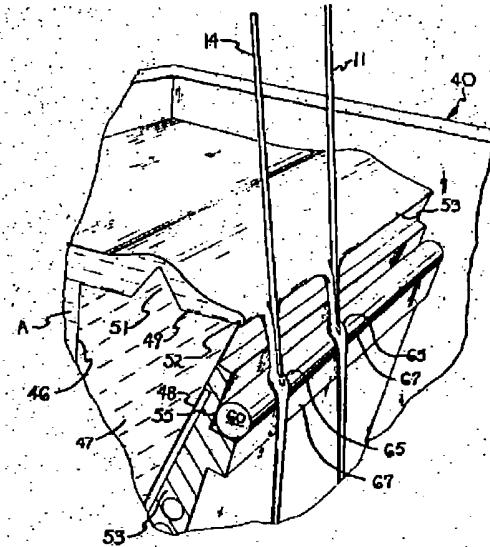


In the Gott invention, the yarns (10) are sized to fill the grooves (20) on the bottom roller 41.

In other words, in the Gott invention, the yarns touch one another along the entire length and width of the web formed by the method and apparatus taught. As taught at Page 2, Col. 1, lines 42-58, an even, continuous coat of adhesive is applied to the aligned yarns, such that "each yarn, and the valleys between the yarns, receive adequate adhesive to give an even, continuous coat."

Similarly, Garick, in U.S. 3,758,329, describes, at Col. 4, lines 16-48 and at lines 49-72, a process in which half of each yarn is coated, and then each half-coated yarn is subsequently coated completely. This is best illustrated by Figure 2:

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Accordingly, the prior art fails to teach or suggest the presently claimed invention, which limits the coating of adhesive to only one side of the yarns. Nothing in the cited art teaches or suggests this claim limitation, and accordingly the cited prior art fails to render the invention defined by these claims obvious.

Reconsideration and withdrawal of the Section 103(a) rejection is respectfully requested.

EXTENSION OF TIME PETITION

The initial response deadline for this filing was 24 June 2004. Applicant respectfully requests a one-month extension of that date, making the new deadline July 26, 2004 (as July 24 is a Saturday).

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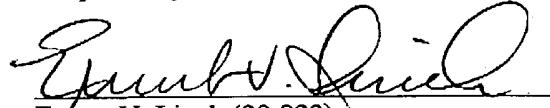
FEE AUTHORIZATION

Please charge all fees (extra claims, time extension, etc.) due in connection with this filing to Deposit Account No. 19-0733.

CERTIFICATE OF FACSIMILE TRANSMISSION

The undersigned hereby certifies that this correspondence was submitted by facsimile in the USPTO on the date shown on Page 1.

Respectfully submitted,


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